DOCUMENT RESUME

ED 355 376 CE 063 209

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TITLE Career Assessment Instruments for Vocational Students with Special Needs.
PUB DATE 7 Dec 92
NOTE 30p.; Paper presented at the American Vocational Association Convention (St. Louis, MO, December 7, 1992). For related documents, see ED 341 823, ED 344 068, and ED 345 035.
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Aptitude Tests; Career Choice; Career Counseling; Career Guidance; Career Planning; Diagnostic Tests; Disabilities; Disadvantaged; *Interest Inventories; Occupational Tests; Scores; Secondary Education; Special Education; *Special Needs Students; Student Evaluation; Testing; Test Norms; Test Reliability; *Test Reviews; Test Validity; *Vocational Aptitude; Vocational Education; *Vocational Evaluation; Vocational Interests

ABSTRACT

This paper reviews the 12 career assessment instruments that have been found to be most used in Texas with students with special needs. Two tables list the instruments along with the opinions of users concerning their qualities. The reviews follow a standard outline. Each review is one to two pages in length and provides this information: title, publisher, population, purpose and description, administration and scoring, scales/scores, norms, reliability and validity, comments, and cost. These instruments are reviewed: Apticom; Career Ability Placement Survey (CAPS); Career Occupational Preference System (COPS); Differential Aptitude Test (DAT); McCarron-Dial System (MDS); Occupational Aptitude Survey and Interest Schedule--Second Edition (OASIS-2); Prevocational Assessment Screen (PAS); The Pictorial Inventory of Careers (PIC); Reading Free Vocational Interest Inventory (R-FVII); Social and Prevocational Information Battery--Revised (SPIB-R); Talent Assessment Program (TAP); and Wide Range Interest Opinion Test (WRIOT). (YLB)

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ED355376

Career Assessment Instruments for Vocational Students With Special Needs

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Paper presented at the annual meeting of
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St. Louis, MO
December 7, 1992

CE063209

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Introduction

For the past decade a myriad of federal legislative acts have emphasized the importance of vocational assessment for students with special needs. Some of these pieces of legislation are P.L. 94-142, recently renamed the Individuals with Disabilities Act of 1990 (P.L. 101-476), the Carl D. Perkins Vocational and Applied Technology Act of 1990 (P.L. 101-392) and the Americans with Disabilities Act of 1990 (P.L. -336). Although individuals with special needs can be defined differently, for the purpose of this paper, the authors use the 1984 CPA terminology which includes individuals with handicaps (disabilities), educationally and economically disadvantaged individuals and individuals of limited English proficiency.

The heterogeneous nature of this population coupled with mandates have encouraged states to develop systems to assure that this vocational assessment process is occurring. The Texas Model, (Texas Education Agency, 1980, 1992) contains three levels of assessment information: Level I information includes special education data; information acquired from interviews with students, parents, and teachers; and information from review of cumulative school records. Level II information includes Level I and information from vocational aptitudes tests, vocational interest and values inventories, and work adjustment competency measures. Level III information includes Level I and Level II plus information from work samples, and exploratory experiences such as vocational course and job tryout.

This model allows appropriate educational placement decisions

to be made at each level while providing for a more in-depth evaluation as it is required. The procedure aids in determining which students can benefit from vocational education and which occupational areas should be investigated prior to placement. As with all evaluation of students with special needs, the process should not serve to screen students out of skills training programs, but to determine appropriate vocational placement.

Instruments Reviewed

The purpose of this paper is to review the 12 career assessment instruments which have been found to be most used in Texas with students with special needs. The study describing how these instruments were identified has been previously reported by Kapes, Parrish and Funderburg (1992) in a paper entitled Instruments Used for Vocational Assessment in Texas: A Report of a Survey (available from the authors). Tables 8 and 9 from that paper are included here listing the 12 instruments along with the opinions of users of each instrument concerning their qualities. It can be noted from examining Table 9 that instruments which have been frequently used did not always receive favorable opinions.

The reviews provided follow a standard outline. Each review is between one and two pages in length and may be copied for further distribution as long as credit is given to the authors. Cost data may be outdated due to recent increases.

Table 8

Assessment Opinion Categories

1-Very Poor
2-Poor
3-Fair/Average
4-Good
5-Very Good
6-Works Well in Group Situations
7-Compare Results with Acad. Achievement Scores at Grade Level
8-Results Have Limited Use
9-Easy to Administer/Score
10-Hard to Administer/Score
11-Administration Time Consuming
12-Need Large Room to Administer
13-State Recommended*
14-Not Appropriate for Certain Disabilities
15-Meets State Requirements
16-Expensive

*There is no state recommendation for assessment instruments.

Table 9

Most Used Instruments with User Opinions

	5-Point Rating					Opinions										
Instrument	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
APTICOM	1	1	2	10	6	-	-	-	3	5	1	-	-	5	-	2
CAPS	-	2	12	6	3	2	-	-	2	-	-	-	1	3	1	-
COPS	-	4	2	7	3	-	-	-	-	1	-	-	-	2	-	-
DAT	-	3	4	7	4	1	-	-	-	1	-	-	-	1	-	2
McC-DIAL	-	2	2	7	11	-	-	-	-	3	-	-	-	1	-	-
OASIS	1	22	15	16	1	-	-	1	8	-	-	1	-	7	5	-
PAS	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-
PIC	-	2	4	6	1	-	-	-	2	-	-	-	-	-	-	-
RFVII	2	3	10	12	2	-	-	-	6	-	-	-	-	1	-	-
SPIB	-	2	2	1	1	-	-	-	-	-	-	-	-	1	-	-
TAPS	1	-	1	11	1	-	-	-	-	1	-	-	-	1	-	-
WRIOT	1	1	5	5	-	1	1	1	4	1	-	-	-	1	-	-

Note. See Table 8 for the opinion associated with each number in the heading. Numbers in the table are frequencies.

TITLE	APTICOM
PUBLISHER	Vocational Research Institute 2100 Arch Street Philadelphia, PA 19103
POPULATION	English and Spanish speaking disadvantaged job applicants, high school and special education students as well as rehabilitation clients.
PURPOSE AND DESCRIPTION	The Apticom is a computerized assessment system which is based on three of the U.S. Department of Labor Employment Service instruments. The aptitude measure assesses 10 aptitudes using 11 specific tests that closely resemble the General Aptitude Test Battery (GATB). The Occupational Interest Inventory assesses twelve interest areas based on the USES Guide for Occupational Information and the related USES Interest Inventory. The Educational Skills Development Battery was derived from the USES General Educational Development (GED) Language and Mathematics scales. The resulting output of the Apticom can be matched to the Occupational Aptitude Patterns (OAPs) and the Guide for Occupational Exploration (GOE) work groups of the Department of Labor. The system itself is a dedicated computer with several add on devices. Items are presented on plastic overlays on an 18 by 24 inch plastic board with holes. The examinee selects alternative answers by inserting a wand into the holes.
ADMINISTRATION AND SCORING	Each test is administered using oral instructions read directly from the manual. Only tests assessing aptitude and language skills require reading beyond the fourth grade level. The examinee is given a brief practice session after a demonstration. The computer times and scores all tests except the Interest Inventory. The Aptitude battery requires 28 minutes and the Educational Skills section requires 25 minutes of timed tests. The Interest Inventory is untimed, but takes about 20 minutes.
SCALES/SCORES	The Aptitude test yields an aptitude profile of the nine GATB aptitudes plus eye-hand coordination. The Interest Inventory profile

plots the 12 GOE interest areas based on frequency of "Like" responses. The Educational Skills Development Profile contains scores on each of the four GED scales. Aptitudes and Interests are presented in standard scores and percentile form through a computer produced printout. A vocational recommendation section provides suggested occupations based on all of these measures.

NORMS

The Aptitude battery norms are based on adults in the U.S. and Canada. The interest inventory uses norms for two groups: secondary students and employed adults. The educational battery is criterion referenced and does not have norms.

RELIABILITY AND VALIDITY

Test-retest reliability for the aptitudes range from .65 to .89 with most above .80. Alpha coefficients and test-retest reliabilities for the Interest Inventory are in the .80's and compare favorably to the USES Interest Inventory. No reliability data are available for the educational skills test.

Validity is based primarily on correlations between the aptitude and interest measures of the Apticom and their corresponding GATB and USES Interest Inventory equivalents. Correlations were highest for the cognitive aptitudes (.80's) and lowest for the manipulation aptitudes (.60's). The interest correlations ranged from .67 to .90. The educational skills tests are based only on content validity.

COMMENTS

The Apticom has become a popular tool for vocational assessment of handicapped persons. The tests are shorter and quicker than their Department of Labor counterparts but yield remarkably similar results. The major drawback is the $6,000 price of a unit with a printer.

COST

Single Apticom unit (without printer): $5,350.
Single Apticom unit (with printer): $6,000.
Midi System (2 Apticom units, master control, 2 printers): $12,400.
Maxi System (4 Apticom units, master control, 4 printers): $22,300.
Spanish/Bilingual Kit (overlays/manual): $495.

TITLE	Career Ability Placement Survey (CAPS)
PUBLISHER	Educational and Industrial Testing Service P.O. Box 7234 San Diego, CA 92107
POPULATION	Students grades 7 through 12 and adults.
PURPOSE AND DESCRIPTION	A multiple aptitude test battery which assesses potential for success in specific occupations. CAPS is divided into eight tests which include: Mechanical Reasoning, Spatial Relations, Verbal Reasoning, Numerical Ability, Language Usage, Word Knowledge, Perceptual Speed and Accuracy, and Manual Speed and Dexterity.
ADMINISTRATION AND SCORING	CAPS may be administered in a group or individually in approximately 45 minutes to one hour. Each of the eight tests is printed on a separate form with instructions written on one side and test items on the reverse side. CAPS can be hand scored, or machine scored locally or through the publisher.
SCALES/SCORES	Scores are presented in two ways: an ability profile based on norms for each of the eight tests and the career profile keyed to occupational clusters in the COPS Interest Inventory. Individuals can then use the COPS System Career Briefs and Career Cluster Booklets, which link results to the Dictionary of Occupational Titles (DOT) and Occupational Outlook Handbook (OOH).
NORMS	The norms are based on a National sample of about 7,000 students in grades 8 through 12 and 1,700 community college students.
RELIABILITY AND VALIDITY	Split half reliability estimates range from .76 to .95 and test/retest reliability coefficients range from .70 to .95. The validity coefficients ranged from the upper .40's to the .80's for achievement test comparisons.

COMMENTS	The CAPS may be a good alternative to the longer aptitude tests for average or below average individuals with about an eighth grade reading level. Its use as a screening battery is suggested.
COST	Specimen set (one copy of each test, manual): $6.50.

TITLE	Career Occupational Preference System (COPS)
PUBLISHER	EDITS P.O. Box 7534 San Diego, CA 92107
POPULATION	Targeted at junior and senior high school students as well as college and adult populations. May be used with upper range of EMR and LD students as well as other handicapped persons with average mental capacity.
PURPOSE AND DESCRIPTION	The COPS is designed to assist individuals in career decision making. It yields 14 job activity interest scores based on clusters of meaningfully related occupations at both the professional and skilled levels. The 14 scales include: business, science, technology, service and arts (both professional and skilled) and outdoor, clerical, communication, and consumer economics (one level only). The entire system is keyed to the Dictionary of Occupational Titles (DOT) and the Occupational Outlook Handbook (OOH) and can be used with Career Briefs and other sources of occupational information.
ADMINISTRATION AND SCORING	The COPS interest inventory contains 168 items in a test booklet which also provides for the answer on an attached sheet. There are four choices for each item from Like to Dislike. Actual test time is estimated at 20 to 30 minutes with scoring taking an additional 15 to 25 minutes. Each item score can range from 0 to 3 points and each scale has 12 items yielding a total possible raw score ranging from 0 to 36. Hand scoring consists of counting the responses for each item in a scale and summing up the total. Reusable booklets and machine scoring are also available.
SCALES/SCORES	Raw scores are translated to percentiles on a separate scoring sheet which converts the 14 scales to a profile by connecting the point represented by each score.
NORMS	Separate norms are provided for males and females on each profile sheet. There are three different profile sheets available for junior high, high school, and college. There are no separate norms for any handicapped group.

RELIABILITY AND VALIDITY	Reliabilities reported for the COPS are of the test-retest type and are generally adequate and of the same magnitude as reliabilities for other prominent interest inventories. Validity information is lacking. There is little evidence in the technical manual of studies that show the relationship between scores on the COPS and entry or success in various occupations. Particularly lacking are studies that demonstrate validity for use of the COPS with handicapped students.
COMMENTS	Although the COPS is often cited as an interest inventory which is used successfully with handicapped individuals, there are some cautions that need to be mentioned. The reading level is somewhat high for some seventh and eighth graders and therefore probably too high for handicapped individuals with limited mental ability. Also, the fairly general nature of the scales and lack of validity information make the COPS less useful for making decisions about specific occupational placements. On the positive side, the COPS is relatively inexpensive and is well connected to sources of occupational information.
COST	Specimen set: $6.25. Counselee materials: Self-scoring booklets and profile sheet per student: 25/$.64; 100/$.62; 500/$.59. Machine scoring booklet non-reusable and scoring: 25/$1.36; 100/$1.32; 500/$1.30.

TITLE	Differential Aptitude Test (DAT)
PUBLISHER	The Psychological Corporation Harcourt Brace Jovanovich, Inc. 555 Academic Court San Antonio, TX 78204
POPULATION	Grades 8 through 12 and adults
PURPOSE AND DESCRIPTION	An integrated battery of aptitude tests designed for educational and vocational guidance in junior and senior high school. Items are in a multiple choice format except for the spelling subtest. There are 2 forms (C & D) and 2 levels (Grades 7-9 and 10-12) available for the 1990 edition. The battery consists of 8 subtests and 9 scores: 1. Verbal Reasoning (VR) 2. Numerical Reasoning (NR) 3. Abstract Reasoning 4. Clerical Speed and Accuracy 5. Mechanical Reasoning 6. Space Relations 7. Spelling 8. Language Usage 9. Scholastic Aptitude (VR + NR)
ADMINISTRATION AND SCORING	The DAT is a group administered paper and pencil test requiring approximately three hours. Administration and scoring may be completed by teachers who have been prepared for this task. Testing may be divided into sessions.
SCALES/SCORES	Raw scores are converted to national percentile ranks and stanines for males, females, and combined. Scores are given for each subtest and for scholastic aptitude, the composite of verbal and numerical reasoning.
NORMS	Separate grade and gender norms are provided. Sampling was based on 520 school districts and approximately 170,000 students. Norms tables are presented by grade and gender for fall and spring administrations.
RELIABILITY AND VALIDITY	Split-half and alternate-form reliability coefficients average in the low .90 range. The DAT has been successfully validated against a variety of secondary school grades, as well as achievement, and aptitude tests.

COMMENTS

The DAT is a very well constructed test battery and is useful in planning education and training. While it provides a sound basis for predicting academic performance, there is a lack of validation data using job or occupational training as the criteria.

Limitations include the test length (2 1/2 - 3 hours) and need for 5th grade reading skills, which could present a problem for some users. However, both the time and reading level have been reduced from the previous version. The DAT is also available with a new developed Career Interest Inventory. In addition, a computer adaptive version has recently been developed.

COST

Specimen set:
- $20.00 for paper and pencil version
- $47.50 for computer adaptive version

Counselee materials:
- Test booklet (package of 25 reusable) $77.00
- Machine-scorable answer documents (package of 100) $89.00
- Counselor's manual $35.00
- Norms Booklet $50.00
- Technical Manual $20.00
- Using DAT with Adults $20.00
- Practice Test (package of 25) $16.00
- Guide to Careers Student Workbook $69.00
- Exploring Aptitude $11.00
- Exploring Interests $11.00
- Using Test Results for Decision-making $11.00
- Computer adaptive testing start-up package (10 uses-Apple) $127.00

TITLE	McCarron-Dial System (MDS)
PUBLISHER	Common Market Press P.O. Box 45628 Dallas, TX 75245
POPULATION	Used with mentally and neurospsychologically impaired including mentally retarded, emotionally disturbed, cerebral palsy, stroke and head trauma, visually impaired, hearing impaired and learning disabled. Ages 16 to adult.
PURPOSE AND DESCRIPTION	The McCarron-Dial System uses a neuropsychological approach to clinical, vocational, and educational evaluation, planning and training. The system describes the individual's abilities and limitations in five factor areas: verbal, cognitive, sensory, motor, emotional, and integration-coping. Evaluation in these areas is used to predict vocational competency, suggest strategies to use in rehabilitation, and provide information about response to an education and rehabilitation program.
ADMINISTRATION AND SCORING	The McCarron-Dial System is individually administered and scored by a qualified vocational evaluator, educational diagnostician, or psychologist. Three-day training sessions are provided by MDS in Dallas when the system is purchased. Time to administer the full battery is 1 week, due to the necessity of observations in a work setting. The abbreviated battery, which includes the first 3 factors and the SSSQ, requires approximately one half day of testing. Data from the individual tests can be submitted to MDS, which results in a computer printed profile and narrative report. Software can be purchased for scoring also.
SCALES/SCORES	Scores are obtained on the instruments in each factor area: <u>Verbal/Cognitive</u> WAIS-R - Wechsler Adult Intelligence Scale - Revised PPVT-R - Peabody Picture Vocabulary Test - Revised

Sensory
BVMGT - Bender Visual Motor Gestalt Test
HVDT - Haptic Visual Discrimination Test
Motor
MAND - McCarron Assessment of Neuromuscular Development
Emotional
OEI - Observational Emotional Inventory
Integration-Coping
BRS - Dial Behavior Rating Scale
SSSQ - Street Survival Skills Questionnaire

The score from each instrument is plotted on the Individual Evaluation Profile and converted to a T-Score. In addition the MAND, OEI, and SSSQ protocols have their own detailed profile.

NORMS

The original normative sample for the entire system was 200. Norms for the WAIS, PPVT, MAND, and HVDT involve 2000 or more observations. Deaf, blind and aged norms are available for the HVDT, HMMT (the version of the Haptic for the blind), and MAND.

RELIABILITY AND VALIDITY

Most data are presented in terms of test-retest reliability coefficients with correlations in the high .80's and .90's. Construct and predictive validity data are provided. Predictive validity is based on the ability to predict the level of vocational functioning after 1 year of training. The data are generally adequate.

COMMENTS

This system is valuable as a screening device to help determine appropriate program placement. However, it should be used with other work samples to determine particular vocational skills. The manuals provide excellent examples of reports and case studies.

While this system has many uses and appears technically adequate, little independent research has been conducted on it. Most published studies have been completed by McCarron, Dial, and/or Associates.

COST

Specimen Sets are not available.
The cost of the MDS is $1,525.
(The only expendable items are the various test answer sheets, behavioral observation forms and report forms.)

TITLE	Occupational Aptitude Survey and Interest Schedule - Second Edition (OASIS-2)
PUBLISHER	PRO-ED 5342 Industrial Oaks Blvd. Austin, TX 78735
POPULATION	Grades 8 through 12.
PURPOSE AND DESCRIPTION	The OASIS-2 is composed of both an Aptitude Survey (AS) and an Interest Schedule (IS). The AS is composed of five subtests (Vocabulary, Composition, Spatial Relations, Word Comparisons and Making Marks) which yield six scores. The IS uses a "Like," "Neutral," "Dislike" response set for 240 items to measure 12 interest scales. The general purpose of the OASIS is to provide a short and easy to use measure of both aptitude and interest for use with junior and senior high school students in career exploration.
ADMINISTRATION AND SCORING	The AS requires approximately 35 minutes to administer with two speeded and three power tests. The IS is not timed and should take approximately 30 minutes to complete. Administration of the OASIS-2 requires an examiner and is most appropriate for group use, although it can be given on an individual basis. Both machine scorable and hand scorable answer sheets are available.
SCALES/SCORES	The AS is scored by counting the number correct and converting it to percentiles and stanines using a student profile sheet. The IS scores are converted to percentiles by following relatively simple procedures, considering that 240 items are involved. Scores for both AS and IS are keyed directly to the Dictionary of Occupational Titles (DOT) and the Guide to Occupational Exploration.
NORMS	Norms are based on 1,505 students from grades 8 through 12 in 13 states. Supporting data suggests that the norming sample was reasonable representative. Suggestions are made for the development of local norms for the AS. Separate gender or combined norms are used with the IS.

RELIABILITY AND VALIDITY

Reliability estimates for the AS range from .70 to .94 and vary by subtest and grade level. Profile reliability is not provided. Validity for the AS is based on similarity to some of the GATB aptitudes, with correlations ranging from .37 to .87.

Test retest reliabilities over five weeks are reported for the IS to range between .72 and .91. Internal consistency measures range from .78 to .95. Content validity for the IS is based on its relationship with the USES interest categories. Factor analysis confirms the 12 scale structure.

COMMENTS

The OASIS-2 is a recent revision of the original OASIS first published in 1983. Many of the criticisms of the first edition have been addressed in this revision. For example, machine scorable answer sheets and standard error score bands have been added. However, extensive validity evidence is still lacking.

COST

Aptitude Specimen Set:	$26.00
Interest Specimen Set:	$26.00
Complete Aptitude Kit:	$89.00
Complete Interest Kit:	$89.00

TITLE	Prevocational Assessment Screen (PAS)
PUBLISHER	Piney Mountain Press, Inc. P. O. Box 333 Cleveland, GA 30528 (800) 255-3127
POPULATION	Youth with mild disabilities or who live in disadvantaged environments.
PURPOSE AND DESCRIPTION	The PAS is an instrument designed to assess motor and perceptual abilities in relation to performance requirements within a local vocational training program. The purpose is to assess vocational competencies and deficiencies to determine appropriate remediation and curricular modifications needed for successful mainstreaming. The PAS is a shorter version of the Skills Assessment Module (SAM), containing 8 of the SAM's 12 hands-on activities which measure the following vocational competencies: 1. Alphabetizing (Clerical) 2. Etch a Sketch Maze (Motor Coordination) 3. Calculating (Clerical/Numerical) 4. Small Parts (Finger Dexterity) 5. Pipe Assembly (Manual Dexterity) 6. O Rings (Form Perception) 7. Block Design (Spatial Perception) 8. Color Sort (Color Perception)
ADMINISTRATION AND SCORING	No special training is required for administering or scoring. The PAS must be administered individually; total administration time is approximately 50 minutes. The PAS may be hand scored or scored by entering results into a computer program (IBM or Apple).
SCALES/SCORES	Times (in minutes and seconds) and numbers of errors for each of the 8 activities are converted to percentile scores. Scores indicate strengths and weaknesses in the 8 competencies associated with the activities. Scores can be used to develop remedial programs and curriculum modifications. The manual contains a matrix of relationships of the 8 competencies to vocational training programs in which competencies are ranked from 1 to 5 in terms of their importance to particular training programs; this ranking is based on research. Student scores can be compared to these. There are also directions

for developing a matrix based on input from local vocational teachers.

NORMS

The PAS was normed on a sample of 293 students at eight different sites (urban, suburban, and rural) in Georgia. Within the total sample, 112 were average students in grades 9 through 12 (50% female, 50% male); 121 were students with mild disabilities in grades 7 through 11 (36% female, 64% male); and 61 were students from disadvantaged backgrounds in grades 9 through 12 (51% female, 49% male). A computerized local norm development system is available.

RELIABILITY AND VALIDITY

Reliability was assessed through the test-retest method on a sample of 50 students over a 3 to 5 day cycle. Pearson r correlations were obtained on 6 subtests and Spearman's correlations on 2 subtests. Coefficients ranged from .82 to .95. Criterion-related validity was measured through a predetermined time study conducted to provide a criterion for performing the industry time standard for types of activities. Content validity was established through the Vocational Performance Matrix, which describes the relationship between tasks required in vocational programs and the subtests. According to the manual, the methods for establishing reliability and validity of instructor ratings are under review.

COMMENTS

The PAS is very easy to administer, and although hand scoring is somewhat confusing, the computer scoring is extremely quick and easy. However, the validity of these particular tasks in respect to vocational training programs is questionable.

COST

Prevocational Assessment Screen $1195.00
Career Development IEP $150.00
Learning Styles Computer Version $150.00
Local Norm Development System $195.00

TITLE	The Pictorial Inventory of Careers (PIC)
PUBLISHER	Talent Assessment, Inc. P.O. Box 5087 Jacksonville, FL 32247-5087
POPULATION	Emotionally, physically and academically handicapped populations.
PURPOSE AND DESCRIPTION	The Pictorial Inventory of Careers (PIC) is an audio-visual instrument designed to measure vocational interest and identify areas for potential occupational exploration and training. A series of 119 slides, depicting vocational-technical careers, are presented in 17 job clusters: 1. Agriculture/Environmental 2. Business - Data Processing 3. Business - Retailing/Sales 4. Business - Secretarial 5. Communication - Art/Graphics 6. Criminal Justice 7. Electrical/Electronics 8. Engineering Technology 9. Food Services 10. Health Services 11. Science and Laboratory 12. Service - Barbering/Cosmetology 13. Service - Fire Science 14. Service - Personal 15. Trade and Industry/Construction 16. Trade and Inventory/Mechanical 17. Trade and Industry/Metal Trades
ADMINISTRATION AND SCORING	The PIC is easy to set up and administer and requires approximately 30 minutes. It can be used individually or with a group and can be self-administered and scored. No training is needed. There are two program levels in the PIC. Program 1 consists of all 119 slides and an additional section in which examinees are presented with 11 definitions of work environments to which they express their preferences ranging from "strongly dislike" to "strongly like". Program 2 consists only of the 119 slides and examinees respond by simply indicating "yes," "?" or "no" as to their degree of interest.

SCALES/ SCORES	The PIC (Program 1) provides three types of results: 1) preference scores, 2) percentile ranks, and 3) stated interest preference. The preference scores are based on raw scores and represented as positive (+) (scores 26-35), negative (-) (scores 16 or below), or neutral (0) (scores 17 to 25).
NORMS	No information is provided in the manual concerning the norms on which the percentile ranks are based. The sample was a random group of 200 men and women enrolled in orientation courses for new students at a California Community College. The group was reportedly "ethnically and socio-economically heterogeneous and ranged in age from 17 to 55."
RELIABILITY AND VALIDITY	Reliability was determined by the test-retest method. The PIC was readministered three weeks later to a sample (23 males and 23 females) of the original 200 community college students. Correlations ranged from .61 (Food Services) to .93 (T&I Construction). The manual claims these correlations are similar to those obtained in the 30 day test-retest reliability of the SCII, and level of correlations are "adequate". No validity data are provided.
COMMENTS	Although the inventory is considered non-reading, it does not focus on occupations that require no reading. In addition, some of the depicted scenes are somewhat vague, and a person might express an interest in the perceived occupation rather than the actual one. A computer program is available with the PIC that creates a printout useful for counseling examinees. The printout is very impressive visually, but the graphic profile of percentile ranks uses letters as symbols that are not explained in the manual. The directions for the program's use are clearly explained in the manual; however, the manual does not state how much memory is required to run the program. If, for example, an Apple computer with 64K is used, the program will stop in the middle because of insufficient space.
COST	Specimen set: No cost, preview for 10 days. Counselee Materials (total package): $495 to $795 depending on the format (filmstrip or video).

TITLE	Reading Free Vocational Interest Inventory (R-FVII)
PUBLISHER	American Association on Mental Deficiency 5101 Wisconsin Avenue, Suite 405 Washington, DC 20016
POPULATION	Persons who are mentally retarded (MR) and/or learning disabled (LD) from ages 13 through adult.
PURPOSE AND DESCRIPTION	The R-FVII is a nonreading vocational preference test consisting of 55 pictorial triads illustrating occupational activities. The inventory provides scores in 11 interest areas for males and females including: 1. Automotive 2. Building Trades 3. Clerical 4. Animal Care 5. Food Service 6. Patient Care 7. Horticulture 8. Housekeeping 9. Personal Service 10. Laundry Service 11. Materials Handling
ADMINISTRATION AND SCORING	The R-FVII can be administered individually or in groups and generally requires 20 to 45 minutes to complete. Scoring involves transcribing client responses onto a score sheet which is time consuming and somewhat tedious.
SCALES/SCORES	Raw scores in each interest area are converted into T-scores, percentiles, and stanines. Raw scores and transformed scores can be placed on a profile sheet that allows for the plotting of percentiles into a graph. Interest areas are designated as high and low.
NORMS	Norms were developed during the 1980-81 school year in a nationwide administration. Norm tables for the following groups are provided in the manual: 1. Public school EMR, males, ages 13 to 15-11 (N = 1080) 2. Public school EMR, males, ages 16 to 22 (N = 1052) 3. Public school LD males, ages 13 to 15-11 (N=1015)

4. Public school LD, males, ages 16 to 19-11 (N = 1019)
5. Adult sheltered workshop, males, no age given (N = 1121)
6. Public school EMR, females, ages 13 to 15-11 (N = 1098)
7. Public school EMR, females, ages 16 to 21-11 (N = 1065)
8. Public school LD, females ages 13 to 15-11 (N=994)
9. Public school LD, females ages 16 to 19-9 (N = 973)
10. Adult sheltered workshop, females, no ages given (N = 1106)

RELIABILITY AND VALIDITY

Test-retest reliabilities range from the high .70's to the .90's. Internal consistency reliabilities range from .61 to .94 with a median of .82. Content validity was incorporated into the test after a complete search of all jobs appropriate to MR and LD individuals was made. Concurrent validity was obtained by administering the R-FVII and the Geist Picture Inventory to subjects. Correlations ranged from .10 to .79. Occupational validity is based on a study of MR males and females in occupational groups comparable to the 11 scales. Occupation groups scored higher on their own scales than on the other 10 scales.

COMMENTS

The R-FVII is valuable in helping determine vocational interests of LD and MR individuals. Validity information represents a weakness and further research needs to be completed in this area.

COST

Specimen set (10 test booklets and 1 manual): $19.85.
Counselee Materials:
Manual $8.30.
Occupational Title Lists $11.90.

TITLE	Social and Prevocational Information Battery - Revised (SPIB-R)
PUBLISHER	CTB/McGraw-Hill Del Monte Research Park Monterey, CA 93940
POPULATION	This instrument is designed to be used with junior and senior high school students who are mildly retarded.
PURPOSE AND DESCRIPTION	The SPIB-R is a paper and pencil test designed to measure social and prevocational knowledge regarded as important for the community adjustment of junior and senior high school students with mild mental retardation. There are nine subtests representing five long range goals: 1. Employability Job Search Skills Job Related Behavior 2. Economic Self-Sufficiency Banking Budgeting Purchasing Habits 3. Family Living Home Management Health Care 4. Personal Habits Hygiene and Grooming 5. Communication Functional Signs
ADMINISTRATION AND SCORING	There are 277 items (236 true-false and 41 multiple choice) which are verbally administered to individuals or small groups. Students mark an "X" in their test booklet over the words "TRUE" or "FALSE" or in a box under the correct picture. Each subtest is untimed but generally requires 15-25 minutes to complete. It is recommended that testing be divided into three sessions during a one week period. The SPIB-R can be hand or machine scored.
SCALES/SCORES	Correct responses are totaled for each subtest and the entire battery to obtain raw scores. Raw scores are converted to percent correct scores or percentile equivalents using norms tables in the manual.

NORMS	No new normative data was collected on the SPIB-R. The original SPIB norm group consisted of 453 junior high and 453 senior high educable mentally retarded students in Oregon.
RELIABILITY AND VALIDITY	Kuder-Richardson formula 20 and test-retest reliability coefficients for the subtests range from the low .60's to the high .80's. Reliabilities are in the low to middle .90's for the total battery score. Predictive validity ranges from .13 to .35 when counselor ratings are compared with SPIB-R scores. Canonical correlation between counselors ratings and test scores was .58. A concurrent validity study correlated 3 SPIB subtests (Banking, Purchasing and Job Search Skills) with behavior performance tests administered to students. Correlations ranged from the middle to upper .70's.
COMMENTS	While the original SPIB was technically adequate, caution should be used in applying this data to the SPIB-R. New normative, reliability, and validity data should be collected. The restriction of norms to Oregon and Caucasian groups limits the generalizability of this instrument. The SPIB-R is particularly useful to special education teachers in curriculum development.
COST	Specimen set: $10.00. Counselee materials: Manual $8.50. Test Booklets $32.50 per pkg. of 20.

TITLE	TALENT ASSESSMENT PROGRAM (TAP)
PUBLISHER	Talent Assessment, Inc. P.O. Box 5087 Jacksonville, FL 32207
POPULATION	Intended for trainable mentally retarded and above, also useful with the disadvantaged. Ages 13 and over or Grade 8 and over.
PURPOSE AND DESCRIPTION	The purpose of the TAP is to assess vocational aptitudes. By identifyirg the specific aptitudes that are strengths within an individual, TAP can relate those strengths to training areas and job areas that utilize those strengths. The TAP is a battery of 10 instruments which measure dexterity, visual and tactile discrimination, and memory as they relate to the functional level of career-related attributes. These attributes in turn relate to worker trait factors which the Dictionary of Occupational Titles uses in describing jobs. The 10 separate tests are: 1. Structural and Mechanical Visualization 2. Discrimination by Size and Shape of Objects 3. Discrimination by Color 4. Discrimination by Touch 5. Dexterity Without Tools 6. Dexterity Without Tools - Large 7. Dexterity With Small Tools 8. Dexterity With Smaller Tools 9. Visualizing Flow Paths 10. Retention of Structural and Mechanical Detail
ADMINISTRATION AND SCORING	The TAP is a completely non-reading assessment instrument. It can be administered in approximately two hours in individual or small group settings. In-service training for evaluators is provided. This training is done on-site and takes one and one-half days. Publishers of the TAP note that para-professionals can administer the instrument, but trained personnel would be necessary for the interpretation of the data. The TAP can be hand scored by a counselor.

SCALES/SCORES	The emphasis in scoring the subtests is on time scores. Timing begins when the client understands the tasks and stops when the task is completed. Timing is calculated to the nearest tenth of a minute on a clock that is included with the instrument. A TALENT QUOTIENT (T.Q.) is obtained as the result of a composite score. The T.Q., as defined by the publishers, relates to functional academic potential.
NORMS	Norms are available for the following populations: twelfth grade male and female students; junior high male and female students, a mentally retarded mixed sex group; male alcoholics, and employed young adults.
RELIABILITY AND VALIDITY	The developers claim a coefficient of stability in limited retesting situations of .86 after a six-month interval. Because of the nature of each subtest, it is not possible to calculate an internal consistency or split-half reliability. Also, there is not a parallel test available for a correlation across forms. Validity data is not available.
COMMENTS	The non-reading aspect of the instrument is cited most often by users as its primary asset.
COST	Complete Kit (includes all testing components, computer scoring, 3 carrying cases, 1 1/2 day training): $5,360.

TITLE	Wide Range Interest Opinion Test (WRIOT)
PUBLISHER	Jastak Associates, Inc. 1526 Gilpin Ave. Wilmington, DE 19806
POPULATION	Individuals who are mentally retarded or handicapped. Grade 8 through adult.
PURPOSE AND DESCRIPTION	Designed to determine interests and attitudes of individuals regardless of age, sex, mental ability, cultural background, or educational level. The items represent jobs which range from the unskilled to the professional level. The test consists of 150 sets of three pictures which are bound in a test booklet. The test taker indicates the most and least liked pictures on a separate answer sheet. Scores are obtained in seven opinion clusters: sedentariness, risk, ambulation, chosen skill level, activity by sex, agreement, interest spread; and 15 cluster areas: 1. Art 2. Literature 3. Music 4. Drama 5. Sales 6. Management 7. Office Work 8. Personal Service 9. Protective Service 10. Social Service 11. Social Science 12. Biological Science 13. Physical Science 14. Numbers 15. Mechanics
ADMINISTRATION AND SCORING	This test can be administered individually or in groups in 40 to 60 minutes. Protocols can be handscored in about 20 minutes using stencils or machine scored.
SCALES/SCORES	The results are converted to T-scores and plotted on a profile consisting of interest areas and attitudes about working conditions. Job titles which are associated with high scores on the scale can be listed.

NORMS

Norms were revised in 1979 and are available by sex for the following age groups:

1. 5-7
2. 8-11
3. 12-15
4. 16-18
5. 20-24
6. 25-34
7. 35+

RELIABILITY AND VALIDITY

Split half reliabilities are in the low 90's for most scales. Validity is based on correlations with the Geist Picture Interest Inventory and range from -.01 to .55.

COMMENTS

The WRIOT is useful in determining work interests of mentally retarded individuals and other handicapped populations due to its picture format. However, normative information is lacking as well as reliability and validity data. Interpretation of the results requires experience due to the lack of specific rules to follow.

COST

Specimen set (manual, picture booklet, answer sheet, report form, job title list): $35.65.
Counselee materials:
Picture Booklet (reusable) $10.90.
Answer Sheets (50) $8.75.
Report Forms (50) $8.75.
Filmstrip $80.00.
Job Title List $39.95.